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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	ATTORNEY DOCKET NO. CONFIRMATION NO.		
10/065,461	10/21/2002	Thomas Ferry	126800	4029.		
23413 75	590 11/07/2006		EXAMINER			
CANTOR COLBURN, LLP			DUONG, FRANK			
55 GRIFFIN RO BLOOMFIELD		•	ART UNIT	PAPER NUMBER		
,			2616			
			DATE MAILED: 11/07/2004	DATE MAILED: 11/07/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

This action is FINAL.   2b   This action is non-final.   3   Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							żγ			
Examiner			Application No	•	Applicant(s)					
Frank Dung   2816	Office Action Summary		10/065,461		FERRY ET AL.					
The MALING DATE of this communication appears on the cover sheet with the correspondence address = Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  Edutations of time rayby be available under the proximate of 37 CRT 13(6), in no event, however, may a reby be timely field  If NO period for regly is appelled above, the maximum statutory period will apply and via upon SIX (8) MONTHS from the malting data of this communication.  Failur to reply within the set or restanded period for regly is appelled above, the maximum statutory period will apply and variety statutors.  1) Responsive to communication(s) filled on 28 August 2008.  2a) This action is FINAL.  2b) This action is non-final.  3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex partle Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) Claim(s) 1-19 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5b) Claim(s) 1-77 is/are allowed.  6b) Claim(s) 1-77 is/are allowed.  6c) Claim(s) 1,3-8-8-14 and 19 is/are rejected.  7c) Claim(s) 2.7 and 18 is/are objected to by the Examiner.  Application Papers  9) The specification is objected to by the Examiner.  Application request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner.  Application Papers  10) The drawing(s) filed on is objected to by the Examiner.  Application from the International Bureau (PCT Rule 17.2(a)).  11) Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. See the attached detailed Office action for a			Examiner		Art Unit					
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WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  Edemismo time may be available under the proximation of 37 CFR 1:18(a). In ne event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. In the Text of the Communication of the Communi	Period fo		appears on the cove	r sheet with the c	orrespondence ac	ddress				
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#### **DETAILED ACTION**

1. This Office Action is a response to the amendment dated 08/28/06. Claims 1-19 are pending in the application.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1, 3-6 and 8-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Sheppard et al (USP 5,739,594) (hereinafter "Sheppard").

Regarding **claim 1**, in accordance with Sheppard reference entirety, Sheppard shows an automatic transfer switch (Fig. 1) comprising:

a housing (not shown; it is inherent the device of Fig. 1 is contained in a housing or panel because of high voltage power sources);

a switch (10) for switching electrical connection from a first external power source (SOURCE 1) to a second external power source (SOURCE 2) (see Fig. 1 for connection details);

a first timer (*TIMER1 discussed at col. 5, line 57*) and a second timer (TIMER2 discussed at col. 6, line 4) disposed within said housing (Fig. 1), said first and second timers having first and second time delays, respectively (*duration of normal power being* 

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unavailable and duration of emergency power being available discussed at col. 5, lines 58-59 and col. 6, line 3, respectively);

said switch (10) responsive to said first and second timers (col. 6, lines 6-8, it is disclosed if emergency power is available, the emergency relay will be closed at 254 after TIMER2 has expired); and

wherein said second time delay is nested within said first time delay (Fig. 5B depicted TIMER2 occurs after TIMER1 and the looping of the process with the GOTO START block. Therefore, TIMER2 is nested in TIMER1).

Regarding **claim 3**, in addition to features recited in base claim 1 (see rationales discussed above), Sheppard further shows a controller (100) disposed within said housing (see Fig. 1); wherein said switch and said first and second timers are responsive to said controller (at col. 4, lines 64-67, it is disclosed the process of Figs. 5A-5C is a general operation of the controller 100).

Regarding **claim 4**, in addition to features recited in base claim 3 (see rationales discussed above), Sheppard further shows a display (32) disposed on said housing for displaying a status of at least one of said switch, said first and second timers, said nested time delays, and an external power source (*Fig. 2 depicts the hardware configuration of the controller 100 to include display 32*).

Regarding **claim 5**, in addition to features recited in base claim 4 (see rationales discussed above), Sheppard further discloses wherein: said display (32) is responsive to said controller (see Fig. 2).

Regarding **claim 6**, in addition to features recited in base claim 3 (see rationales discussed above), Sheppard further discloses a control panel (34) disposed on said housing for inputting information to said controller (see col. 3, lines 18-21 for description of user input device 34).

Regarding **claim 8**, in addition to features recited in base claim 5 (see rationales discussed above), Sheppard further discloses an actuator (16) responsive to said controller; said switch responsive to said actuator; and wherein said actuator comprises an overcentering mechanism (relays) (see col. 2, lines 49-51 and col. 3, lines 5-6).

Regarding **claim 9**, in addition to features recited in base claim 8 (see rationales discussed above), Sheppard further discloses a drive system (relays) responsive to said controller; said actuator responsive to said drive system; and wherein said drive system is a high speed drive system (col. 3, lines 5-16, it is disclosed relays provides means for energizing actuator 16 and relay control signal is provided from controller 100).

Regarding **claim 10**, in addition to features recited in base claim 1 (see rationales discussed above), Sheppard further discloses wherein; said switch comprises electrical contacts, wherein said electrical contacts are high pressure contacts (*this limitation is common in an automatic transfer switch having high voltage sources*).

Regarding **claim 11**, in addition to features recited in base claim 1 (see rationales discussed above), Sheppard further discloses wherein; the beginning time of said second time delay is determined from the end time of said first time delay (*Fig. 5B depicts TIMER2 at step 248 begins after TIMER1 at step 242 expired*).

Regarding claim 12, in addition to features recited in base claim 5 (see rationales discussed above), Sheppard further discloses wherein; said second time delay is responsive to said controller; wherein said controller overrides the nesting of said second time delay nested within said first time delay (*Fig. 5B depicts CLEAR TIMER2 at YES fork of block 250 or NO fork of block 252*); and wherein said second time delay is arranged serial to said first time delay (*Fig. 5B depicts timer delays are serially arranged*).

Regarding **claim 13**, in accordance with Sheppard reference entirety, Sheppard shows an automatic transfer switch control system (Fig. 1) comprising:

an automatic transfer switch (Fig. 1) configured to switch (12) power service between a first power source (SOURCE 1) and a second power source (SOURCE 2), said automatic transfer switch (Fig. 1) comprising: a switch (10), a first timer (TIMER 1), a second timer (TIMER2), a controller (100), and a computer (32, 34, 36 and 100 or Fig. 2); said switch responsive to said first and second timers (col. 3, lines 12-24 and elements 30, 20, 26, 16 an d18 depicts in Fig. 1); said first and second timers responsive to said controller (Fig. 5B and steps 240-254); said controller responsive to said computer (Fig. 2); wherein said first and second timers have first and second time delays, respectively, and said second time delay being nested within said first time delay (Fig. 5B depicted TIMER2 occurs after TIMER1 and the looping of the process with the GOTO START block. Therefore, TIMER2 is nested in TIMER1).

Regarding **claim 14**, in addition to features recited in base claim 13 (see rationales discussed above), Sheppard further discloses wherein: said first timer has a

first parameter setting (col. 5, lines 57-59) and said second timer has a second parameter setting (col. 6, lines 3-8), and wherein; said controller is responsive to said computer for establishing said first and said second parameter settings (col. 3, lines 40-44).

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claim 19 rejected under 35 U.S.C. 103(a) as being unpatentable over Sheppard.

Regarding **claim 19**, in accordance with Sheppard reference entirety, Sheppard shows an automatic transfer switch (Fig. 1) comprising: a switch (10) for switching electrical connection from a first external power source (SOURCE 1) to a second

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external power source (SOURCE 2); a plurality of timers (TIMER1 and TIMER2 discussed at col. 5, line 57 and col. 6, line 4) configured to provide a first time delay, a second time delay, wherein said second time delay is nested with said first time delay (Fig. 5B depicted TIMER2 occurs after TIMER1 and the looping of the process with the GOTO START block. Therefore, TIMER2 is nested in TIMER1); and said switch (10) responsive to said plurality of timers (Fig. 1 depicts Controller 100 having the discussed timers output Relay Control 30 to Relay/Transformer Box 20 that outputs control signal 26 to Actuator 16 that control the switching of Transfer Switch 10). Sheppard fails to further shows a third time delay nested with said first time delay. However, such limitation lacks thereof from Sheppard is well known and contemplated by those skilled in the art.

Sheppard has already taught the second time delay nested with the first time delay. To modify Sheppard teaching to include the third time delay in addition to the second time delay that nested with said first time delay would be an easy task to those skilled in the art by modifying Sheppard's flow chart of Fig. 5B to include another conditional block to serve as the TIMER3 with TIMER2 nested in TIMER1 to ascertain the diagnostic symptoms.

Thus, it would have been obvious to those skilled in the art at the time of the invention was made to modify Sheppard's flow chart of Fig. 5B to include another conditional block to serve as the TIMER3 to arrive the claimed invention. A simple motivation for doing so is to provide an automatic transfer switch that provides more specific indication of diagnostic symptoms (col. 1, lines 60-64).

## Allowable Subject Matter

4. Claims 15-17 are allowed.

5. Claims 2, 7 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Response to Arguments

6. Applicants' arguments filed 08/28/06 have been fully considered but they are not persuasive. Applicants' arguments will be addressed hereinbelow in the order in which they appear in the response filed 08/28/06.

In the Remarks of the outstanding response, on pages 10-11, Applicants disagrees with the Examiner's interpretation of Sheppard's teaching of TIMER1 and TIMER2 to correspond to the claimed limitation of "... said second time delay is nested within said first time delay". The Applicants argue that "Sheppard TIMER2 cannot be nested within TIMER1 if it occurs after TIMER1", "TIMER2 is illustrated in Sheppard to be logically in series with TIMER1 and not to be nested within TIMER1", "Sheppard to clearly disclose a TIMER2 that does not become active until TIMER1 timed out and until emergency power is available, which is substantially different from TIMER2 being nested within TIMER1", and "disclosure in Sheppard of TIMER2 being within the GOTO START block is not the same as TIMER2 being nested within TIMER1".

Applicants' arguments have been noted. However, Examiner respectfully disagrees and asserts the interpretation of Sheppard's teaching of TIMER1 and

TIMER2 as depicted in Fig. 5B to correspond the disputed limitation is proper. A careful review of the claims Examiner finds no specific definition for the disputed term in the claims to exclude it from Examiner's broadest, reasonable interpretation of the Sheppard's teaching. Therefore, any of the Applicants' above interpretations of Sheppard teaching is applicable to the disputed claimed limitation "nested within". Applicants are reminded during patent examination, claims are given their broadest reasonable interpretation consistent with the specification. Perhaps Applicants refer to certain features that are disclosed in the present application but not recited in the reject claims in making the contention that the Sheppard reference fails to show certain feature of Applicants' invention. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re

Examiner believes an earnest attempt has been made in addressing all of the Applicants' arguments. Due to the amendment fails to place the instant application in a favorable condition for allowance, the rejection is maintained.

#### Conclusion

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Duong whose telephone number is 571-272-3164. The examiner can normally be reached on 7:00AM-3:30PM, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on 571-272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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FRANK DUONG PRIMARY EXAMINED

November 2, 2006